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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/601,927

06/23/2003

Yasuhito Miyata

78731

8015

22242

7590

09/27/2006

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EXAMINER

ROSENBERG, LAURA B.

ART UNIT

PAPER NUMBER

3616

DATE MAILED: 09/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/601,927	MIYATA, YASUHIITO	
	Examiner	Art Unit	
	Laura B. Rosenberg	3616	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 July 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3,5-13 and 15-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-13 and 16-24 is/are rejected.
- 7) ☒ Claim(s) 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date. _____   | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. This office action is in response to the amendment filed 19 July 2006, in which claims 1-3, 5-10, 13, and 19 were amended and claim 24 was added.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 5-13, and 16-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hosono et al.(6,007,090) in view of Amamori (6,832,780). Hosono et al. disclose an airbag apparatus (for example, including #M) for a motorcycle (best seen in figure 1) having front (including #Wf) and rear (including #Wrr) wheels and a seat (including #5) for a rider (including #R) spaced rearward of the front wheel, the airbag apparatus able to protect the rider in the event of frontal collisions (best seen in figure 7), the airbag apparatus comprising:

- Retainer (including #10, 12, 15) for the airbag mounted to the motorcycle (can be seen in figure 3)
- Airbag (including #14) able to be deployed from the retainer in a primarily upward, vertical direction forwardly of the seat (best seen in figures 7, 8) with the inflated airbag having an uppermost/distal end portion (for example, top portion of #14 as seen in figure 7) spaced upwardly from the retainer

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- Airbag having a predetermined inflated volume (best seen in figure 7)
- Inflator (including #16) sized to inflate the predetermined airbag volume (best seen in figure 8)
- Inflated airbag has a rear (for example, right side in figure 7) that is adjacent and facing the rider and a front (for example, left side in figure 7) that is spaced forwardly therefrom and facing away from the rider (best seen in figure 7)
- Airbag stowed in the retainer (best seen in figure 3), the retainer positioned to allow the airbag to inflate upwardly, forwardly, and rearwardly (best seen in figures 7, 8)
- Airbag includes only a single chamber to be inflated (can be seen in figures 3, 7, 8)

Hosono et al. do not disclose an inflation control device, or a direction control member, for restricting inflation of the airbag.

Amamori teaches an airbag apparatus (including #1) for a vehicle having front (not shown) and rear (not shown) wheels and a seat (not shown) for a rider (for example, occupant seen in figure 1) spaced rearward of the front wheel (occupant would be located in between seat and front wheel), the airbag apparatus able to protect the rider in the event of frontal collisions, the airbag apparatus comprising:

- Retainer (including #10) for the airbag
- Airbag (including #1) able to be deployed from the retainer in a primarily upward, vertical direction forwardly of the seat (best seen in figure 1) with the inflated airbag having an uppermost/distal end portion (for example, top portion of #1 as seen in figure 1) spaced upwardly from the retainer

- Inflation control device/direction control member (including #6) spaced upwardly from the retainer upon airbag inflation (best seen in figure 1) and able to restrict inflation of the airbag in a predetermined fore and aft direction (front to rear direction) that is generally aligned with the rider movement due to frontal collisions, and allowing inflation of the airbag in the upward vertical direction and sized so that size of the inflated airbag in the upward vertical direction is substantially larger than in the predetermined fore and aft direction (best seen in figure 1)
- Inflation control device connected to the airbag at two positions (for example, in the forward and rearward positions, which is to the left and right in figure 1) that are spaced from each other generally along the fore and aft direction and are at an approximately equal distance from the retainer closer to the airbag upper/distal end portion than to the retainer with the airbag deployed and inflated (best seen in figure 1)
- Inflation control device comprising tethering device (including #6) able to connect generally opposing portions (front and rear) of the airbag (best seen in figure 1)
- Inflation control device comprising at least one tether (including #6) connected to the airbag at an inflated airbag portion adjacent to the rider (for example, to the right in figure 1) and generally extends away from the rider in the direction aligned with rider movement (best seen in figure 1)
- Airbag having a predetermined inflated volume (best seen in figure 1)
- Inflator (including #12) sized to inflate the predetermined airbag volume with the inflation control device, optimizing the inflated airbag volume extending in the

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upward direction and able to maximize rider protection while keeping the size of the inflator to a minimum (best seen in figure 1)

- Airbag comprises a central panel (for example, including portion facing occupant and windshield) and side panels (for example, including portions facing toward the left and right doors of the vehicle, not shown based on the sectional view of figure 1), the inflation control device comprising connectors attached to the central panel at one end and to the central panel at the opposite end (for example, connectors are ends of tether #6 connected at forward and rearward portions of the central panel, as can be seen in figure 1)
- Inflation control device increases rigidity of the airbag in the fore and aft direction generally aligned with rider movement over rigidity of the airbag in the upward direction (best seen in figure 1)
- Recess (for example, not labeled, but located on surface #2 and generally aligned with occupant's face, as seen in figure 1) formed in the airbag adjacent the rider
- In the event that a plurality of tethers are used (for example, two tethers can be seen in figure 1), there would be a plurality of connections on forward and rearward sides of the airbag, including a generally upper connection beyond which the airbag extends when inflated (best seen in figure 1)
- Inflated airbag has a rear (right side) that is adjacent the rider and a front (left side) that is spaced forwardly therefrom, the plurality of connections generally disposed at the front and rear of the airbag and able to restrict size of the inflated airbag therebetween (best seen in figure 1)

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- Front and rear connections are spaced from the retainer such that an area between the direction control member and the retainer is larger than an area between the direction control member and the distal end portion of the airbag (can be seen in figure 1)
- Airbag stowed in the retainer (not shown in stowed state, but airbag would be located in retainer/housing #10 with releasable lid #14 covering the airbag module), the retainer positioned to allow the airbag to inflate upwardly, forwardly, and rearwardly (best seen in figure 1), and predetermined positions of connections between the control member (including #6) and the airbag (including #1) cause a predetermined, primary inflation direction to be in a generally upward direction so that size of the inflated airbag is maximized in the upward direction and restricted in a forward and rearward direction (best seen in figure 1)
- Third end (for example, end of additional tether component that is connected to right side of airbag at a point closer to the top of the airbag than the generally horizontal tether component, as seen in figure 1) of the direction control member being spaced a third distance from the retainer that is greater than the predetermined distances of the first and second ends (right and left ends of the generally horizontal tether component) from the retainer (best seen in figure 1)
- Airbag includes only a single chamber to be inflated (can be seen in figure 1)

It would have been obvious to one skilled in the art at the time that the invention was made to modify the airbag apparatus of Hosono et al. such that it comprised inflation control device, or direction control member, as claimed in view of the teachings

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of Amamori so as to provide an airbag that can rapidly complete the inflation even when the output of the inflator is relatively small and that can promptly receive the occupant so as to properly protect the occupant (Amamori: Summary of the Invention), as well as to provide the airbag with a desired configuration when inflated that will allow for maximum protection for riders who vary in size, weight, height, and position.

***Allowable Subject Matter***

4. Claim 15 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

5. Applicant's arguments with respect to claims 1-3, 5-13, and 16-24 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the




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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura B. Rosenberg whose telephone number is (571) 272-6674. The examiner can normally be reached on Monday-Friday 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on (571) 272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
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